Military Packaging Laboratory
Lakehurst, NJ

Packaging Materials & Container Testing:

- DOD Qualifying Activity
  - Barrier Materials
  - Preservatives
  - Manufacturing Audits
- Lead Service Activity - ESD
  - Packaging Materials
  - Test Methodology
- Navy First Article & Qualification (Containers)
- Sponsor – T&E

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Test Methods: Materials

Test Methods: Materials (Cont'd)

PERFORMANCE TESTING:

- Electromagnetic Interference (EMI) Attenuation
- Triboelectric Charge Generation
- Electrostatic Decay
- Surface Resistivity
- Electrostatic Shielding
- Water Vapor Transmission Rate (W
- Water Vapor Permeation: MOCON
- Oxygen Permeation: MOCON
- Odor Barrier Effectiveness
- Waterproofness
- Heat Seal Strength
- Seam Fabrication
- Seam Strength
- Creep
- Transparency, with aging

Test Methods: Materials (Cont'd)

DURABILITY TESTING:

- Bursting Strength
- Breaking Strength
- Tear Strength; & Peak Load & Energy to
- Tensile Breaking Factor
- Elongation
- Puncture Resistance
- Backing Peel Strength
- Blocking Resistance
- GELBO Flexing & Low-Temperature Flexi
- Marking Abrasion Resistance
- Curl Resistance

Test Methods: Materials (Cont'd)

COMPATIBILITY / CORROSION TESTING:

- Contact Corrosivity
- Vapor Inhibitor Ability (VIA) & After Exha
  - ✓ Ferrous & Multi-Metal VCI
- Compatibility with Copper
- Compatibility with MIL-PRF-131
- Delamination (Oil Resistance)
- Water Resistance
- Water Resistance of Marking
- Seam and Material Water Resistance
- Aging Resistance

LONG TERM TESTING:

- One-Year Storage Stability
- Long-Term Protection

Test Methods: Containers

QUALIFICATION TESTING

- Vibration (external)
- Shock - Drop
  - ✓ Flat/Corner/Edge
- Repetitive Shock (external)
- Handling
  - ✓ Fork truck compatibility
  - ✓ Pull & push tests
  - ✓ MK45 hand truck compatibility
  - ✓ Pallet truck compatibility
  - ✓ Sling compatibility
- Incline Impact (external)
- Stacking
- Leak Test
- Hoisting
- Requirements Inspection and Form &Fit

Test Methods: Containers (cont'd)

FIRST ARTICLE TESTING:

- Inspection to drawing package
- Leak test
- 18 inch flat drop (without the asset)
- Leak test
- Form & fit check with an actual item